Application No.: 09/847946 Docket No.: YAI-002

AMENDMENTS TO THE CLAIMS

Please amend the claims 4, 5, 6, 11, 12, and 13 as follows:

- 1. (Canceled)
- 2. (Canceled)
- 3. **(Previously Presented)** An anti-inflammatory compound comprising the following structure:

$$X_{2}-X_{1}-X_{2}-X_{3}-X_{4}-X_{5}-X_{6}$$

wherein

X_a is a membrane translocation domain comprising from 6 to 15 amino acid residues;

X₁ is L, A, I or nor-leucine (Nle);

X₂ is D, E, N, Q, homoserine (Hser) or 2-ketopropylalanine (2-ketopropy-A);

X₃ is W, F Y, 4-biphenyl-alanine (Bpa), homophenylalanine (Hphe), 2-Naphthylalanine (2-Nal), 1-Naphthylalanine (1-Nal), or cycloxexyl-alanine (Cha);

X₄ is S, A, E, L, T, nor-leucine (Nle), or homoserine (Hser);

X₅ is W, H, homophenylalanine (Hphe), 2-Naphthylalanine (2-Nal), 1-Naphthylalanine (1-Nal), O-benzyl serine (SeroBn), or 3-Pyridylalanine (3-Pal); and

X₆ is L, A, I, or nor-leucine (Nle).

- 4. (Currently Amended) The anti-inflammatory compound of claim 3, [further emprising] wherein X_a is the amino acid sequence TA.
- 5. (Currently Amended) The anti-inflammatory compound of claim 3, further comprising the variable X_7 , wherein X_7 is the amino acid sequence QTE.
- 6. (Currently Amended) The anti-inflammatory compound of claim 3, wherein said compound comprises a sequence selected from the group consisting of TALDWSWLQTE (SEQ ID NO:28),[;] LDWSWLQTE (SEQ ID NO:29),[;] TALDWSWL (SEQ ID NO:30),[;] ALDWSWLQTE (SEQ ID NO:31),[;] LDWSWLQTE (SEQ ID NO:32),[;] LDWSWL (SEQ ID NO:33),[;] TALDWSWLQT (SEQ ID NO:34),[;] TALDWSWLQ (SEQ ID NO:35),[;] ALDWSWLQT (SEQ ID NO:36),[;] LDWSWLQ (SEQ ID NO:37),[;] LDWSWLQT (SEQ ID NO:38),[;] ADWSWL (SEQ ID NO:39),[;] LDWSWA (SEQ ID NO:40),[;] ADWSWA (SEQ ID NO:40),[

ID NO:41),[\(\dagger)\) LDFSWL (SEQ ID NO:42),[\(\dagger)\) LDYSWL (SEQ ID NO:43),[\(\dagger)\) LDWAWL (SEQ <u>ID NO:44),[;]</u> LDWEWL (SEQ ID NO:45),[;] TAADWSWLQTE (SEQ ID NO:46),[;] ADWSWLQTE (SEQ ID NO:47),[;] TAADWSWL (SEQ ID NO:48),[;] AADWSWLQTE (SEQ ID NO:49),[;] ADWSWLQTE (SEQ ID NO:50),[;] ADWSWL (SEQ ID NO:51),[;] TAADWSWLQT (SEQ ID NO:52),[;] TAADWSWLQ (SEQ ID NO:53),[;] AADWSWLQT (SEQ ID NO:54),[;] ADWSWLQ (SEQ ID NO:55),[;] ADWSWLQT (SEQ ID NO:56),[;] ALDWSWAQTE (SEQ ID NO:57),[;] LDWSWAQTE (SEQ ID NO:58),[;] TALDWSWA (SEQ ID NO:59),[;] ALDWSWAQTE (SEQ ID NO:60),[;] LDWSWAQTE (SEQ ID NO:61),[;] LDWSWA (SEQ ID_NO:62),[;] TALDWSWAQT (SEQ ID_NO:63),[;] TALDWSWAQ (SEQ ID NO:64),[;] ALDWSWAQT (SEQ ID NO:65),[;] LDWSWAQ (SEQ ID NO:66),[;] LDWSWAQT (SEQ ID NO:67),[;] TAADWSWAQTE (SEQ ID NO:68),[;] ADWSWAQTE (SEQ ID NO:69),[;] TAADWSWA (SEQ ID NO:70),[;] AADWSWAQTE (SEQ ID NO:71),[;] ADWSWAQTE (SEQ ID NO:72),[;] ADWSWA (SEQ ID NO:73),[;] TAADWSWAQT (SEQ ID NO:74),[;] TAADWSWAQ (SEQ ID NO:75),[;] AADWSWAQT (SEQ ID NO:76),[;] ADWSWAQ (SEQ ID NO:77),[;] ADWSWAQT (SEQ ID NO:78),[;] TALDFSWLQTE (SEQ ID NO:79),[;] LDFSWLQTE (SEQ ID NO:80),[;] TALDFSWL (SEQ ID NO:81),[;] ALDFSWLQTE (SEQ ID NO:82),[;] LDFSWLQTE (SEQ ID NO:83),[;] LDFSWL (SEQ ID NO:84),[;] TALDFSWLQT (SEQ ID NO:85),[;] TALDFSWLQ (SEQ ID NO:86),[;] ALDFSWLQT (SEQ ID NO:87),[;] LDFSWLQ (SEQ ID NO:88),[;] LDFSWLQT (SEQ ID NO:89),[;] TALDYSWLQTE (SEQ ID NO:90),[;] LDYSWLQTE (SEQ ID NO:91),[\(\frac{1}{2}\)] TALDYSWL (SEQ ID NO:92),[\(\frac{1}{2}\)] ALDYSWLQTE (SEQ ID NO:93),[\(\frac{1}{2}\)] LDYSWLQTE (SEQ ID NO:94),[;] LDYSWL (SEQ ID NO:95),[;] TALDYSWLQT (SEQ ID NO:96),[;] TALDYSWLQ (SEQ ID NO:97),[;] ALDYSWLQT (SEQ ID NO:98),[;] LDYSWLQ (SEQ ID NO:99),[;] LDYSWLQT (SEQ ID NO:100),[;] TALDWAWLQTE (SEQ ID NO:101),[;] LDWAWLQTE (SEQ ID NO:102),[;] TALDWAWL (SEQ ID NO:103),[;] ALDWAWLQTE (SEQ ID NO:104),[;] LDWAWLQTE (SEQ ID NO:105),[;] LDWAWL (SEQ ID NO:106),[;] TALDWAWLQT (SEQ ID NO:107),[;] TALDWAWLQ (SEQ ID LDWAWLQT (SEQ ID NO:111),[;] TALDWEWLQTE (SEQ ID NO:112),[;] LDWEWLQTE (SEQ ID NO:113),[;] TALDWEWL (SEQ ID NO:114),[;] ALDWEWLQTE (SEQ ID NO:115),[;] LDWEWLQTE (SEQ ID NO:116),[;] LDWEWL (SEQ ID NO:117),[;] TALDWEWLQT (SEQ ID NO:118),[;] TALDWEWLQ (SEQ ID NO:119),[;] ALDWEWLQT (SEQ ID NO:120),[;] LDWEWLQ (SEQ ID NO:121),[;] and LDWEWLQT (SEQ ID NO:122).

Docket No.: YAI-002

Application No.: 09/847946 Docket No.: YAI-002

7. (Previously Presented) The anti-inflammatory compound of claim 3, wherein X_a consists of 6-12 amino acid residues.

- 8. (Previously Presented) The anti-inflammatory compound of claim 3, wherein X_a consists of 6-10 amino acid residues.
- 9. (Previously Presented) The anti-inflammatory compound of claim 3, wherein X_a comprises at least five basic amino acid residues.
- 10. (Previously Presented) The anti-inflammatory compound of claim 7, wherein X_a comprises at least five amino acid residues independently selected from L-arginine, D-arginine, L-lysine and D-lysine.
- 12. (Currently Amended) An anti-inflammatory compound comprising an amino acid sequence selected from the group consisting of [‡] RRMKWKKTALDWSWLQTE (SEQ ID NO:131),[‡] rmkwkkTALDWSWLQTE (SEQ ID NO:132),[‡]
 YGRKKRRQRRRTALDWSWLQTE (SEQ ID NO:133),[‡] ygrkkrrqrrrTALDWSWLQTE (SEQ ID NO:134),[‡] rrrrrrTALDWSWLQTE (SEQ ID NO:135),[‡]
 RRRRRRRTALDWSWLQTE (SEQ ID NO:136),[‡] YARKARRQARRTALDWSWLQTE (SEQ ID NO:137),[‡] yarkarrqarrTALDWSWLQTE (SEQ ID NO:138),[‡]
 YARAARRAARRTALDWSWLQTE (SEQ ID NO:139),[‡] yaraarraarrTALDWSWLQTE (SEQ ID NO:140),[‡] YGRKKRRQRRRLDWSWL (SEQ ID NO:141),[‡]
 ygrkkrrqrrrLDWSWL (SEQ ID NO:142),[‡] RRMKWKKLDWSWL (SEQ ID NO:143),[‡]
 rrmkwkkLDWSWL (SEQ ID NO:144),[‡] rrrrrrLDWSWL (SEQ ID NO:145),[‡]
 YARAARRAARRLDWSWL (SEQ ID NO:146),[‡] yaraarraarrLDWSWL (SEQ ID NO:147),[‡] and RRRRRRRLDWSWL (SEQ ID NO:148).

Application No.: 09/847946 Docket No.: YAI-002

13. (Currently Amended) An anti-inflammatory compound [having a structure]

comprising an amino acid sequence selected from the group consisting of [+]

H-RRMKWKKTALDWSWLQTE-NH₂ (SEQ ID NO: 161);

H-YGRKKRRQRRRTALDWSWLQTE-NH2 (SEQ ID NO: 162);

H-rrrrrrTALDWSWLQTE-NH₂ (SEQ ID NO: 163);

H-YARKARRQARRTALDWSWLQTE-NH2 (SEQ ID NO: 164);

H-YARAARRAARRTALDWSWLQTE-NH2 (SEQ ID NO: 165);

H-RRMKWKKLDWSWL-NH₂ (SEQ ID NO: 166);

H-rrmkwkkLDWSWL-NH₂(SEQ ID NO: 167);

H-rrrrrLDWSWL-NH₂ (SEQ ID NO: 168);

H-YARAARRAARRLDWSWL-NH₂ (SEQ ID NO: 169);

H-yaraarraarrLDWSWL-NH₂ (SEQ ID NO: 170); and

H-YGRKKRRQRRRLDWSWL-NH₂ (SEQ ID NO: 171)